Mathematics, Master's programme

120 credits

Matematik, masterprogram

6MMAT

Valid from:

Determined by
Board of Studies for Electrical Engineering, Physics and Mathematics

Date determined

Entry requirements

Degree in Swedish

Filosofie masterexamen med huvudområde matematik

Curriculum

Semester 2 (Spring 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TANA15	Numerical Linear Algebra	6	A1X	1	C
TAMS29	Stochastic Processes Applied to Financial Models	6	A1X	3	E
TATA27	Partial Differential Equations	6*	A1X	2	E
TATA64	Graph Theory	6*	A1X	2	E
TATA66	Fourier and Wavelet Analysis	6*	A1X	4	E
TATA78	Complex Analysis, second course	6*	A1X	2	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TDDB68	Concurrent Programming and Operating Systems	6	G2X	3	E
TMMV08	Computational Fluid Dynamics	6	A1X	1	E
TPPE32	Financial Risk Management	6	A1X	2	E
TPPE54	Advanced Planning and Scheduling	6	A1X	1	E
Period 2					
TGTU76	Philosophy of Science	6	G1X	4	C
TANA31	Computational Methods for Ordinary and Partial Differential Equations	6	A1X	2	E
TATA27	Partial Differential Equations	6*	A1X	4	E
TATA64	Graph Theory	6*	A1X	2	E
TATA66	Fourier and Wavelet Analysis	6*	A1X	2	E
TATA78	Complex Analysis, second course	6*	A1X	3	E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDD12	Database Technology	6	G2X	4	E
TDDD14	Formal Languages and Automata Theory	6	G2X	2	E
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E

Course code	Course name	Credits	Level	Timetable module	ECV
TMMV07	Computational Fluid Dynamics, advanced course	6	A1X	4	E
TPPE19	Analysing and Improving Manufacturing Operation	6	A1X	4	E

Specialisation: Applied and Computational Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA66	Fourier and Wavelet Analysis	6*	A1X	4	E
TBMI26	Neural Networks and Learning Systems	6	A1X	2	E
TMMV08	Computational Fluid Dynamics	6	A1X	1	E
TSBK07	Computer Graphics	6*	A1X	4	E
Period 2					
TATA66	Fourier and Wavelet Analysis	6*	A1X	2	E
TSBK07	Computer Graphics	6*	A1X	1	E

Specialisation: Computer Science

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDB68	Concurrent Programming and Operating Systems	6	G2X	3	E
Period 2					
TDDC78	Programming of Parallel Computers - Methods and Tools	6	A1X	3	E
TDDD12	Database Technology	6	G2X	4	E
TDDD14	Formal Languages and Automata Theory	6	G2X	2	E

Specialisation: Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TATA27	Partial Differential Equations	6*	A1X	2	E
TATA64	Graph Theory	6*	A1X	2	E
TATA66	Fourier and Wavelet Analysis	6*	A1X	4	E
TATA78	Complex Analysis, second course	6*	A1X	2	E
Period 2					
TATA27	Partial Differential Equations	6*	A1X	4	E
TATA64	Graph Theory	6*	A1X	2	E
TATA66	Fourier and Wavelet Analysis	6*	A1X	2	E
TATA78	Complex Analysis, second course	6*	A1X	3	E

Specialisation: Modelling and Optimization in Economics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS29	Stochastic Processes Applied to Financial Models	6	A1X	3	E
TPPE32	Financial Risk Management	6	A1X	2	E
TPPE54	Advanced Planning and Scheduling	6	A1X	1	E
Period 2					
TPPE19	Analysing and Improving Manufacturing Operation	6	A1X	4	E

Semester 3 (Autumn 2017)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TAMS22	Probability Theory and Bayesian Networks	6	A1X	2	E
TAMS39	Multivariate Statistical Methods	6	A1X	4	E
TATA62	Project - Applied Mathematics	12*	A1X	4	E
TDDC88	Software Engineering	12*	A1X	1	E
TDDD08	Logic Programming	6	A1X	4	E
TNM067	Scientific Visualization	6	A1X	3	E
TPPE53	Financial Valuation Methodology	6	A1X	2	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
TSIT03	Cryptology	6	A1X	2	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1X	1	E
TSKS15	Detection and Estimation of Signals	6	A1X	2	E
Period 2					
TAOP04	Mathematical Optimization	6	A1X	4	C
TAMS17	Statistical Theory, advanced course	6	A1X	1	E
TAMS38	Experimental Design and Biostatistics	6	A1X	3	E
TAOP18	Supply Chain Optimization	6	A1X	1	E
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TATA62	Project - Applied Mathematics	12*	A1X	4	E
TDDC88	Software Engineering	12*	A1X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E
TGTU04	Leadership	6	G2X	2	E
TPPE61	Financial Optimization	6	A1X	2	E
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSRT08	Optimal Control	6	A1X	3	E

Specialisation: Applied and Computational Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TSBB06	Multidimensional Signal Analysis	6*	A1X	2	E
Period 2					
TSBB06	Multidimensional Signal Analysis	6*	A1X	3	E
TSRT08	Optimal Control	6	A1X	3	E

Specialisation: Computer Science

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TDDC88	Software Engineering	12*	A1X	1	E
TDDD08	Logic Programming	6	A1X	4	E
TSIT03	Cryptology	6	A1X	2	E
TSKS12	Modern Channel Coding, Inference and Learning	6	A1X	1	E
Period 2					
TDDC88	Software Engineering	12*	A1X	1	E
TDDD56	Multicore and GPU Programming	6	A1X	2	E

Specialisation: Mathematics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 2					
TAMS17	Statistical Theory, advanced course	6	A1X	1	E

Specialisation: Modelling and Optimization in Economics

Course code	Course name	Credits	Level	Timetable module	ECV
Period 2					
TAOP04	Mathematical Optimization	6	A1X	4	E
TAOP18	Supply Chain Optimization	6	A1X	1	E
TAOP61	Optimization of Realistic Complex Systems	6	A1N	3	E
TPPE61	Financial Optimization	6	A1X	2	E

Semester 4 (Spring 2018)

Course code	Course name	Credits	Level	Timetable module	ECV
Period 1					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C
Period 2					
TQXX30	Degree project - Master's Thesis	30*	A1X	-	C

ECV = Elective / Compulsory /Voluntary
*The course is divided into several semesters and/or periods